

## Claims

1. A bearing mat for supporting an exhaust gas catalyst in a metallic catalyst housing used for cleaning motor vehicle exhaust gases, characterized by a binding agent-free, multi-layered flat structure consisting of thermally stable threads, said flat structure being mechanically reinforced by quilting seams, whereby

- the threads consist of a crimped yarn consisting of filaments and are fixed under tensile stress in the flat structure by the quilting seams; and
- the quilting seams are produced with a sewing thread having a thermal stability lower than the operating temperature of the bearing mat.

2. The bearing mat according to claim 1, characterized in that the crimped yarn consists of  $\text{SiO}_2$  filaments and/or filaments made of textile glass and/or  $\text{Al}_2\text{O}_3$  containing inorganic filaments.

3. The bearing mat according to claim 1 ~~or 2~~, characterized in that provision is made for seams on the cutting edges of the bearing mat, said seams consisting of a thermally stable thread, for example textile glass.

4. A process for producing a bearing mat according to <sup>Claim 1</sup> ~~any~~  
~~one of claims 1 to 3~~, whereby

- crimped yarn consisting of thermally stable filaments is pulled off from rolls (2) in a plurality of strands (4) and placed under tensile stress on a transporting device (3) moving transversely to the direction in which they are pulled off for forming a plane, multi-layered flat structure;
- the flat structure (4) moved along by the transporting device (3) is mechanically reinforced with quilting seams (7) in such a way that the threads of the flat structure continue to be under tensile stress when the flat structure (4) is removed from the transporting device (3); and
- a sewing thread is used for the quilting seams (7) having a thermal stability lower than the operating temperature of the bearing mat.

5. The process according to claim 4, whereby mats (8) are punched out of the continuous web mechanically reinforced with quilting seams (7), and that prior to or after the punching process, seams (9) are applied within the zone of the

